AMENDMENTS TO THE CLAIMS

1. (Currently amended)   An object-oriented temporal context programming system

comprising:

a database;

data objects, each data object being ~~defin~~ defined by a class of object ~~with~~ and having

at least one attribute, said attribute being at least relatively persistently stored in the database so that

past and present values of the attribute are stored in the database with an indication of the effective

time of each value of the attribute, ~~any change in attribute also being at least relatively persistently~~

~~stored in the data object along with an indication of the time of effect of the change in the attribute;~~

and

methods which the class can carry out, said methods having an argument with an

effective time, said method being at least relatively persistently stored in the database so that past

and present versions of the method are stored in the database with an indication of the effective time

of each version of the method, ~~any change in said method also being at least relatively persistently~~

~~stored in the data object along with an indication of the time of effect of the change in the method,~~

execution of said method with a particular time argument utilizing the particular values of attributes

of the effected data objects and the particular version of the method in effect for the particular time

specified.

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2. (Currently amended)   An object-oriented temporal context programming system comprising:

<u>a database;</u>

data objects, each data object <u>being</u> defin<s>in</s><u>ed by</u> a class of object <s>with</s><u>and having</u> at least one attribute, said attribute being at least relatively persistently stored in the database<u>, so that</u> <u>past and present values of the attribute are stored in the database</u> with an indication of the effective time of <u>each value of</u> the attribute<s>, any change in attribute also being at least relatively persistently stored in the data object along with an indication of the time of effect of the change in the attribute</s>; and

methods which the class can carry out, said methods having an argument which is effective time, execution of said method with a particular time argument utilizing the <u>values of the</u> attributes of the effected data objects in effect for the particular time specified.

3. (Currently amended)   An object-oriented temporal context programming system comprising:

<u>a database;</u>

data objects, each data object <u>being</u> defin<s>in</s><u>ed by</u> a class of object <s>with</s><u>and having</u> at least one attribute, said attribute being at least relatively persistently stored in the database,<u> so that</u> <u>past and present values of the attribute are stored in the database</u><s>any change in attribute also being at least relatively persistently stored in the data object</s>; and

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methods which the class can carry out, said methods having an argument which is

effective time, said method being at least relatively persistently stored in the database, so that past

and present versions of the method are stored in the database with an indication of the effective time

of each version of the method, ~~any change in said method also being at least relatively persistently~~

~~stored in the data object along with an indication of the time of effect of the change in the method,~~

execution of said method with a particular time argument utilizing the particular version of the

method in effect for the particular time specified.

4. (Currently amended)   An object-oriented context programming system comprising:

a database;

data objects, each data object being defin~~in~~ed by a class of object and having~~with~~

attributes, at least one attribute of one data object being at least relatively persistently stored in the

database, so that at least two values of the attribute are stored in the database, each value being

associated with an indication of the context ~~of the attribute~~thereof, ~~any change in attribute also~~

~~being at least relatively persistently stored in the data object along with an indication of the context~~

~~of the change in the attribute~~; and

methods which the class can carry out, at least one of said methods having an

argument which is an indication of context, said method being at least relatively persistently stored

in the database, so that at least two versions of the method are stored in the database, each version

being associated with an indication of the context ~~of the method~~thereof, ~~any difference in said~~

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~~method also being at least relatively persistently stored in the data object along with an indication of~~ ~~the context of the difference in the method,~~ a method executed with a particular context argument utilizing the <u>values of the</u> attributes of the effected data objects and the <u>version of the</u> method in effect for the particular context.

5. (Previously amended) An object-oriented context programming system as claimed in claim 4 wherein the context is a version of an application program, so that by identifying a particular context a different version of the application program runs and gives the user a different vantage point from which to experience the program.

6. (Currently amended) An object-oriented context programming system comprising:

<u>a database;</u>

data objects, each data object <u>being</u> defin~~in~~<u>ed by</u> a class of object ~~with~~<u>and having</u> attributes, at least one attribute of one data object being at least relatively persistently stored in the database<u>, so that at least two values for the attribute are stored in the database, each value being</u> <u>associated</u> with an indication of the context of the ~~attribute~~<u>value</u>~~, any change in attribute also being~~ ~~at least relatively persistently stored in the data object along with an indication of the context of the~~ ~~change in the attribute~~; and

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methods which the class can carry out, at least one of said methods having an

argument which an indication of context, a method executed with a particular context argument

utilizing the values of the attributes of the effected data objects in effect for the particular context.

7. (Currently amended)   An object-oriented context programming system comprising:

data objects each being defininged by a class of object withand having attributes; and

methods which the class can carry out, at least one of said methods having an

argument which is an indication of context, said method being at least relatively persistently stored

in the database, so that at least two versions of the method are stored in the database each version

being associated with an indication of the context of the method any difference in said method also

being at least relatively persistently stored in the data object along with an indication of the context

of the difference in the method, a method executed with a particular context argument utilizing the

version of the method in effect for the particular context.

8. (Currently Amended)   An object-oriented temporal context programming system as

claimed in any one of claims 1- 3, further including a new attribute added to said data object and

being stored in the database with an indication of the effective time of the new attribute, which

effective time is subsequent to existing times in the databasethe time of creation of the object.

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9. (Previously added) An object-oriented context programming system as claimed in any one of claims 4 - 7, further including a new attribute added to said data object and being stored in the database with an indication of the context of the new attribute.

10. (Previously added)   An object-oriented temporal context programming system as claimed in any one of claims 1- 3, wherein the execution of said method is with respect to a time in the past.

11. (Previously added)   An object-oriented temporal context programming system as claimed in claim 10 wherein one attribute has an additional context of an error and an equivalent attribute has an additional context of the error corrected, and wherein the methods can be run to show the effect in the past both with and without the error.

12. (Previously added)   An object-oriented temporal context programming system as claimed in any one of claims 1- 3, wherein the execution of said method is with respect to a time in the future, and the execution of the methods predicts events in the future based on probabilities.

13. (Currently Amended) An object-oriented temporal context programming system as claimed in any one of claims 1- 3, wherein said ~~data object~~class of object is formed from a temporal base ~~object~~

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class as a subclass of the temporal base object class which and inherits its temporal context

capabilities of reading (getting) or storing (setting) from the temporal base object class.

14. (Currently amended)   An object-oriented context programming system as claimed in

any one of claims 4-7, wherein said data class of object is formed from a base object class as a

subclass of the base object class which inherits its context capabilities of reading (getting) or storing

(setting) from the base object class.

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